

---

# Mobile Poultry Processing on Nantucket

Katie Bowles, Trevor Drane, Adam LaBombard, &  
Charles Ritchie

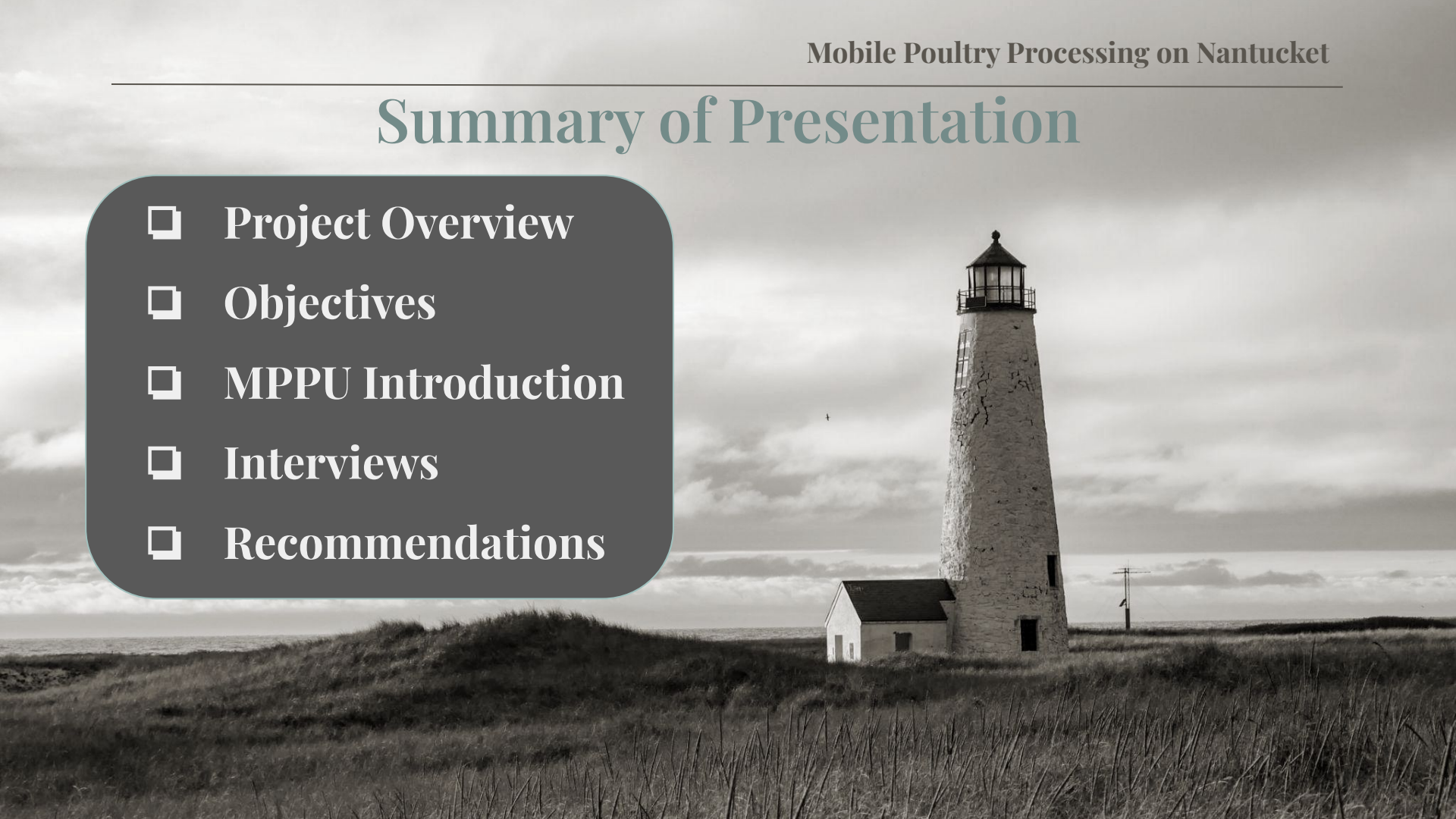


**WPI**



# Summary of Presentation

- ❑ **Project Overview**
- ❑ **Objectives**
- ❑ **MPPU Introduction**
- ❑ **Interviews**
- ❑ **Recommendations**



# Sustainable Nantucket

**NonProfit focused on promoting  
sustainable and locally sourced foods**



- Farm to School
- Mentor Farmer Program
- NantucketGrown™
- Farmers & Artisans Market

# Project Overview

**The goal of our project was to create a plan and set of materials that Sustainable Nantucket can use for the development and approval of a Mobile Poultry Processing Unit on Nantucket.**



# Objectives

**Evaluate Lessons Learned**

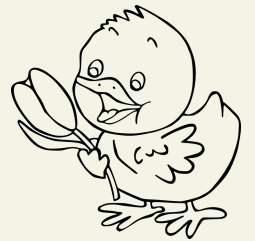
**Evaluate and Determine MPPU  
Technology and Operational Guidelines**



**Identify Applicable  
Regulations**

**Identify the Perspectives  
of Stakeholders**

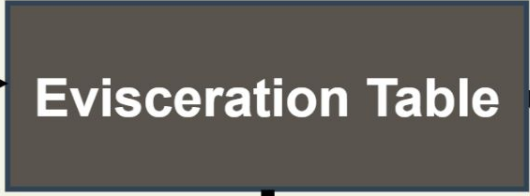
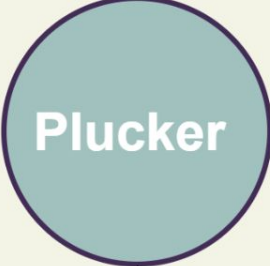
**Develop Deliverables**



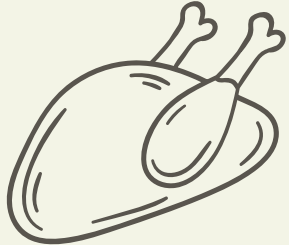
# What is an MPPU?

Slaughter Side

Evisceration Side



Cleaned birds



## Mobile Poultry Processing on Nantucket

---



# Why an MPPU?

On island processing and sale

Mobile

Cost effective





# Types of MPPUs



## Enclosed Unit

- Four walls and ceiling
- Climate controlled
- Collects wastewater
- \$90,000

# Types of MPPUs



## Open Air Mounted Unit

- Open bed trailer
- Cramped work space
- Exposed to elements
- \$25,000-\$35,000

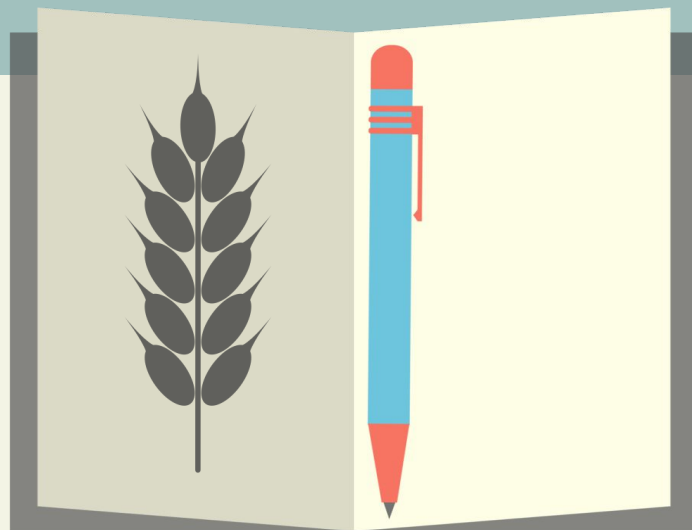
# Types of MPPUs



## **Enclosed Storage, Open Air Unit**

- Processing in open air
- Equipment storage out of the elements
- Flexible design
- \$25,000

# Interviews



# Farmer Perspectives

7

Farmers

4

Yes

2

Maybe

1

No



**Current Poultry:**

200 layers

50 broilers

50 ducks

**Potential Poultry:**

600 layers

1000+ broilers

Some turkeys

# Local Official Interviews

**Nantucket Waste  
Options**

**Nantucket Sewer  
Department**

**Nantucket Board  
of Health**

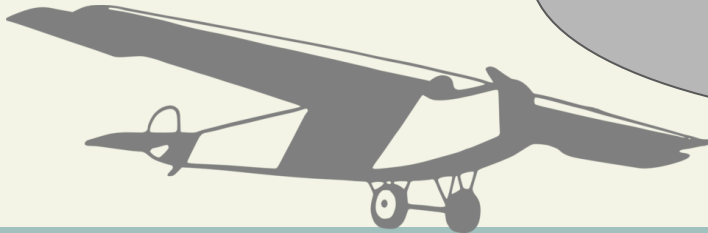


# MPPU Discussions

**Martha's Vineyard  
Agricultural Society**

**Island Grown  
Initiative of Martha's  
Vineyard**

**New Entry  
Sustainable Farming  
Project**



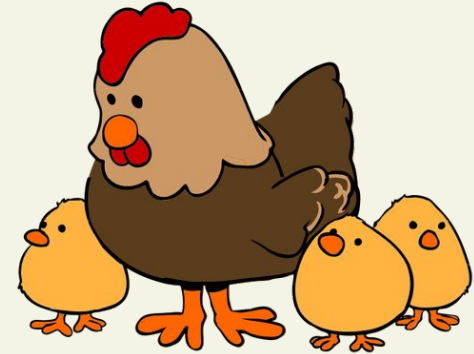
# What Should Sustainable Nantucket Look for in an MPPU?

**Flexibility**

**Easy processing**

**Ease of setup and cleanup**

**Safe to use**





# Recommendations



# MPPU Type Recommendation



- Equipment is protected from elements
- Purchase equipment separately
- Flexibility in design
- Easier to tow

# Slaughter Location

## What Works

Level ground w/ lots of space

Water and electric connection

Restroom facilities for  
processors

## What Doesn't Work

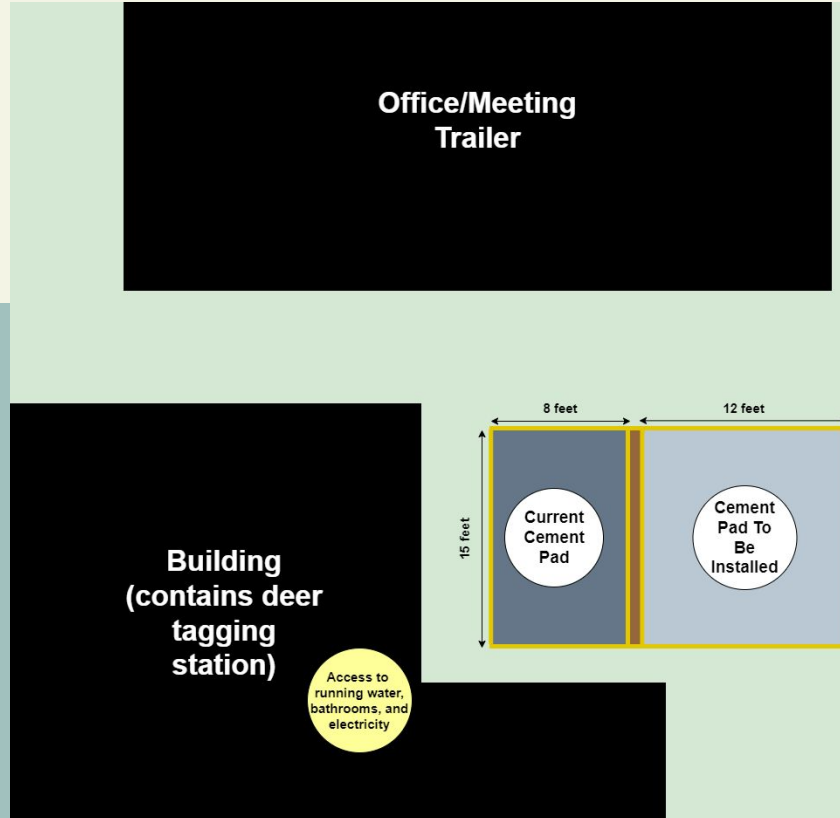
Being close to wetlands

Being close to biologically  
active fields

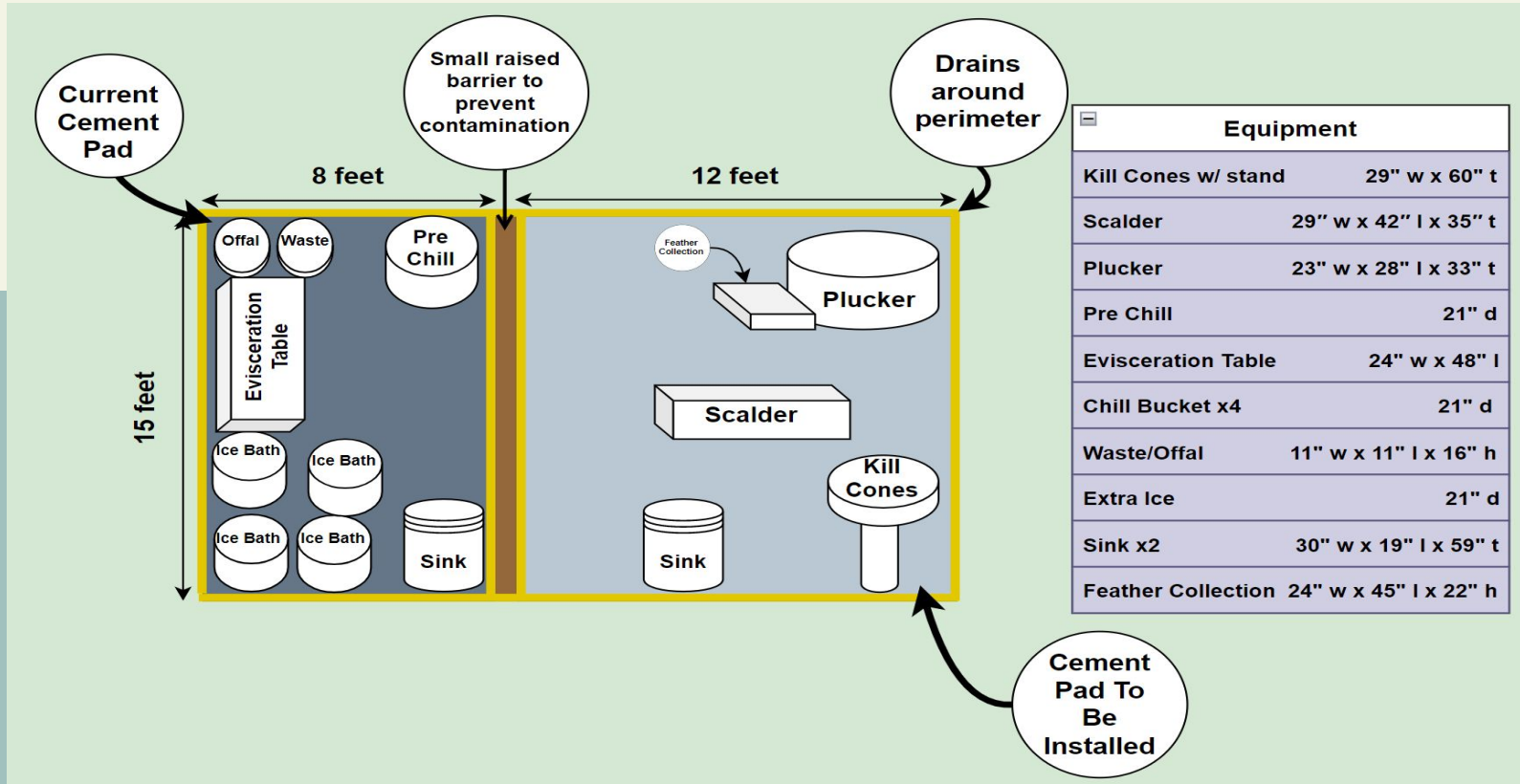
Federal, state and local land  
restrictions



# Location Example



# Location Example pt. 2



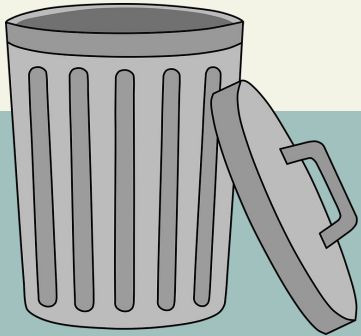
# Waste Disposal

## Solid Waste

- Woodchips
- Feathers
- Waste from evisceration

## Liquid

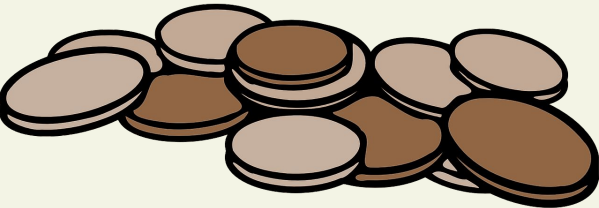
- Water from cleaning
- Water from ice
- Water from scalding and plucker



# Operating Expenses

## Major Costs

- \$ Labor - \$5/bird
- \$ Ice - \$3/bird
- \$ Propane - \$0.50/bird



## Minor Costs

- \$ Cleaning supplies
- \$ Bags
- \$ Water
- \$ Electricity
- \$ Gas
- \$ Wear and tear

# Operating Procedures and Manual

- Model HACCP Plan
- Recall Plan
- Operations Manual





**Thank You!**

**Any Questions?**

# References

- Sustainable Nantucket. (n.d.). *Sustainable Nantucket*. Retrieved December 11, 2022, from <https://sustainable-nantucket.org>
- Mobile Poultry Processing Unit Projects*. (n.d.). New England Small Farm Institute. Retrieved December 10, 2022, from [https://www.smallfarm.org/main/special\\_projects/mppu/](https://www.smallfarm.org/main/special_projects/mppu/)
- Tufts University. (n.d.). *New Entry Sustainable Farming Project*. Eastern Massachusetts Mobile Poultry Processing Unit (MPPU) | New Entry Sustainable Farming Project. Retrieved December 10, 2022, from <https://nesfp.nutrition.tufts.edu/farmer-training/livestock-poultry/poultry-resources/eastern-massachusetts-mobile-poultry-processing>
- Poore, S. (2016, July 22). The cluck stops here: Mobile poultry processing unit geared toward family farms. Roanoke Times. [https://roanoke.com/archive/the-cluck-stops-here-mobile-poultry-processing-unit-geared-toward-family-farms/article\\_e81dbdae-4f01-11e6-8570-3389ae916745.html](https://roanoke.com/archive/the-cluck-stops-here-mobile-poultry-processing-unit-geared-toward-family-farms/article_e81dbdae-4f01-11e6-8570-3389ae916745.html)